

# *Caryville - Jacksboro Utilities Commission*

---

P. O. Box 121 — Jacksboro, Tennessee 37757

COMMISSIONERS

ROBERT M. BURDEN, Chairman  
JAMES F. WRIGHT, Secretary  
RAY GREEN, Treasurer

TELEPHONE

OFFICE: 562-9776  
WATER PLANT: 562-2234  
WASTEWATER PLANT: 562-9895

June 30, 2016

Robert G. O'Dette, M.S., P.E.  
State Biosolids Coordinator  
Division of Water Resources  
Tennessee Department of Environment and Conservation  
William R. Snodgrass Tennessee Tower, 11<sup>th</sup> Floor  
312 Rosa L. Parks Avenue  
Nashville, TN 37243-1102

RE: Notice of Intent for land application of biosolids

Dear Mr. Odette:

These represent the documents that support the Utilities response to the comments you have expressed regarding the NOI application for the Rice Farm site(s).

Comment #1:

The area designated as "72" is mostly acceptable, but needs further delineation via a detailed map showing all setback IAW our state rules and general permit under Chapter 0400-40-15.

Response:

Please refer to attachment 1 that contains detailed maps with descriptions of the three (3) fields proposed for use at Rice Farm site #1.

Comment #2:

Horses were observed in area 72 and special attention must be given to the site restrictions associated with the land application of Class B biosolids (non-EQ biosolids) – please acknowledge this in your response and provide details as to how the site(s) will be managed.

Response:

Please refer to attachment 2 which contains our Permission for Biosolids Application form that all appliers are required to read and sign. The form addresses site restrictions for Class B biosolids, water-quality setbacks, weather-related restrictions, soil restrictive site conditions, and threatened / endangered species. Appliers are also provided a copy of State Rules 0400-40-15 and 40 CFR Part 503.

Comment #3:

With the small amount of biosolids generated and anticipated to be land applied each year, it is not feasible that several hundred acres will be used as the application areas. Based upon your volumes and analytical results, it is estimated that no more than 30-40 acres will be needed to land apply all of your biosolids per year. Therefore, in your response please provide a more detailed breakdown of these large farm sites into smaller sites that will match the actual application areas.

Response:

Please refer to our response for Concern #1. At the current time the applier only proposes to use a total of approximately 60.1 acres for land application. Our NOI application referenced the entire amount of available acreage at the Rice Farm site(s) to allow for field rotation in the event the applier wished to use a different area. If this comes to pass, our NOI will be updated accordingly and submitted with the pertinent information for each additional field.

Comment #4:

Area "62" is not acceptable – too many sinkholes and other features that make it a problematic area.

Response:

Due to the fact that the applier was not intending to use site #2 (Area "62") at this time. We submitted maps of the entire amount of acreage owned at this location. It appears that there are areas that would be suitable for land application at this location. The matter will be discussed with the applier and if he wishes to pursue the matter, detailed maps for useable acreage will be created and submitted for approval at a later date.

If there are questions regarding the comments or additional information needed, please call Mr. Greg Smith, Sludge Program Coordinator (423) 562-9895.

Sincerely,

A handwritten signature in black ink, appearing to read 'Franklin D. Wallace', written over a circular stamp or seal.

Franklin D. Wallace  
Executive Secretary

Enclosures



DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102  
(615) 532-0625

NOTICE OF INTENT (NOI) for Land Application of Non-Exceptional Quality Biosolids

Generator Name: Caryville-Jacksboro Utilities Commission		Current NPDES No: TN0026263		Existing Tracking No:	
Owner or Operator: (the person or legal entity which controls the site's operation)					
1	Name of Official Contact Person: (individual responsible for a site) Franklin D. Wallace		Title or Position: Executive Secretary		
	Mailing Address: P.O. Box 121		City: Jacksboro	State: TN	Zip: 37757
	Phone: ( ) 423-562-9776		E-mail: cjuc@ccdi.net		
2	Name of Local Contact Person: (if appropriate, write "same as #1") Earl G. Wilson		Title or Position: Pretreatment Coordinator		
	Site Address: (this may or may not be the same as street address) 450 Queener Road		Site City: Caryville	State: TN	Zip: 37714
	Phone: ( ) 423-562-9895		E-mail: gregory_cjuc@ccdiwireless.net		
Write in the box (to the right) or circle the number (above) to indicate where to send correspondence: 1					

All non-exceptional biosolids land application sites that have been approved by the division prior to the effective date of this permit will be covered under this permit upon receipt of the signed certification statement, completed NOI and a copy of site approval letter(s).

<b>A. OPERATIONAL INFORMATION:</b> Estimated annual amount of biosolids generated (dry weight basis) 100 (tons) Estimated annual amount of biosolids to be land applied (dry weight basis) 100 (tons)	
<b>B. BIOSOLIDS TREATMENT PROCESS:</b> Please provide a description of the biosolids treatment process used prior to biosolids being land applied (use a separate sheet if necessary): Aerobic digestion after required detention time. Then dewatered by belt press.	
<b>C. CHEMICAL ANALYSIS:</b> Indicate which contaminant standard(s) the biosolids meet: <b>Table 1 Ceiling Contaminant Concentrations:</b> <input checked="" type="checkbox"/> <b>Table 3 Contaminant Concentrations:</b> <input checked="" type="checkbox"/> <ul style="list-style-type: none"><li>Submit analytical results to demonstrate eligibility for and compliance with the quality criteria specified in the General Permit.</li><li>Submit PCB and TCLP analytical results that are less five years old.</li></ul> 9 metals & NH3 & TCLP & PCB(s). See enclosed reports.	
<b>D. PATHOGEN REDUCTION LEVEL ACHIEVED:</b> Indicate alternative used to achieve the pathogen reduction. For Class A, Alternatives 5 and 6; for Class B, Alternatives 2 and 3, list the specific Process to Further Reduce Pathogens (PFRP) or Process to Significantly Reduce Pathogens (PSRP). <b>Class A:</b> <input type="checkbox"/> Alternative 1 <input type="checkbox"/> Alternative 2 <input type="checkbox"/> Alternative 3 <input type="checkbox"/> Alternative 4 <input type="checkbox"/> Alternative 5 <input type="checkbox"/> Alternative 6 (List PFRP) (List Eq. PFRP) <b>Class B:</b> <input checked="" type="checkbox"/> Alternative 1 <input type="checkbox"/> Alternative 2 <input type="checkbox"/> Alternative 3 (List PSRP) (List Eq. PSRP) Provide a detailed description of the pathogen treatment process. Attach laboratory analytical and/or process monitoring results, as appropriate, that demonstrate pathogen reduction is being achieved: Aerobic digestion. Fecal results. See enclosed reports.	

**NOTICE OF INTENT (NOI) for Land Application of Non-Exceptional Quality Biosolids**

**E. VECTOR ATTRACTION REDUCTION LEVEL ACHIEVED:** Indicate the option used to achieve the vector attraction reduction.

- ☐ Option 1      ☐ Option 2      ☐ Option 3      ☒ Option 4  
☐ Option 5      ☐ Option 6      ☐ Option 7      ☐ Option 8

If one of the vector attraction reduction Options 1 - 5 is selected, do the biosolids meet Class A pathogen reduction requirements prior to or at the same time as meeting the vector attraction reduction requirements?

☒ Yes      ☐ No

Provide a detailed description of the vector attraction reduction treatment process. Attach laboratory analytical and/or process monitoring results, as appropriate, that demonstrate vector attraction reduction is being achieved:

Aerobic digestion. Sour test attached.

**F.** If one of the vector attraction reduction Options 1 - 8 above was not performed, indicate how the vector attraction reduction will be performed on the field as part of the land application process:

- ☐ Option 9 (Subsurface Injection)      ☐ Option 10 (Incorporation)

Not applicable.

**G. SAMPLING PLAN:** Include a detailed copy of the biosolids sampling plan as specified in the instructions. The sampling plan must address sampling protocols for contaminants, pathogen reduction, and vector attraction reduction quality criteria.

Sampling plan is attached.

**H. LAND APPLICATION AREA(S):** Include a list of land application area(s) that will be used for disposal of biosolids. Attach a detailed map showing appropriate buffers in accordance with section 3.2.1 (add additional pages if necessary)

Area Number	Area (acres)	Application Rate (tons/acre) per section 3.2.2	Latitude (decimal)	Longitude (decimal)
Rice Farm #1	240 Total		36.253611	84.012250
Field #1	26.6	One (1) dry ton per acre		
Field #2	16.1	One (1) dry ton per acre		
Field #3	17.4	One (1) dry ton per acre		
Rice Farm #2	304 Total		36.264011	83.555555

**I. CERTIFICATION:** I certify, under penalty of law, that contaminant concentrations in the biosolids, pathogen reduction, vector attraction reduction, and other quality criteria of the biosolids stated in the regulations have been met or, if appropriate, will be met prior to land application of biosolids. I further certify that other information in this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my own knowledge as well as the inquiry of the person(s) who manage the system, or those directly responsible for gathering the information, the information submitted, to the best of my knowledge and belief, is true, accurate and complete. I further acknowledge that the facility or generator of biosolids described above is eligible for coverage under TDEC's General Permit for the Land Application of Biosolids. I am aware that there are significant penalties for submitting false information, including possibility of fines and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Name: Franklin D. Wallace

Title: Executive Secretary

Signature: \_\_\_\_\_

Telephone: 423 562-9774

Date Signed: 6 / 30 / 2016

**NOTE:** In evaluating NOI forms, TDEC may request additional information to complete its review to determine the eligibility for coverage under TDEC's General Permit.

Submit the original completed and signed form to Water.Permits@tn.gov or:  
 Biosolids NOI Processing - Division of Water Resources  
 William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor  
 Nashville, TN 37243-1102

## ATTACHMENT #1

Detailed maps referencing available acreage.



AOI Properties

Clear AOI

AOI Information

Name

Map Unit Symbols

☒ Use Soil Survey Area Map Unit Symbols

☐ Use National Map Unit Symbols

Area (acres)

26.6

Soil Data Available from Web Soil Survey

Campbell County, Tennessee (TN013)

Data Availability

Tabular and Spatial, complete

Version 10, Sep 22, 2015

Spatial Data

Version 4, Dec 20, 2013

Import AOI

Export AOI

Quick Navigation

Address

4192 General Carl W. Stinner Hwy Lafollette, TN

Show location marker

☒

View

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit



Rice Farm Field #1: Approximate acreage available is 26.6. This field is located approximately 519 feet from the main highway. It borders Frontier Rd and Claws road and is approximately within 50 feet of both. The barn and home located next to the field are at a distance of greater than 100 feet. The applicer is aware of the setbacks and will comply with the requirements.



Area of Interest

Open AllClose All

AOI Properties

Clear AOI

AOI Information

Name

Map Unit Symbols

☒ Use Soil Survey Area Map Unit Symbols  
☐ Use National Map Unit Symbols

Area (acres)

16.1

Soil Data Available from Web Soil Survey

Campbell County, Tennessee (TN013)

Data Availability

Tabular and Spatial, complete

Tabular Data

Version 10, Sep 22, 2015

Spatial Data

Version 4, Dec 20, 2013

Import AOI

Export AOI

Quick Navigation

Address

4192 General Carl W. Stiner Hwy Lafollette, IN

Show location marker☒

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Rice Farm Field #2: Approximate acreage available is 16.1. This field is located approximately 160 feet from the main highway. There is a barn located on this field. The applier is aware of the setbacks and will comply with the requirements.



<b>AOI Properties</b>	
<b>Clear AOI</b>	
<b>AOI Information</b>	
Name	
Map Unit Symbols	<input checked="" type="radio"/> Use Soil Survey Area Map Unit Symbols <input type="radio"/> Use National Map Unit Symbols
Area (acres)	17.4
<b>Soil Data Available from Web Soil Survey</b>	
<b>Campbell County, Tennessee (TN013)</b>	
Data Availability	Tabular and Spatial, complete
Tabular Data	Version 10, Sep 22, 2015
Spatial Data	Version 4, Dec 20, 2013
<b>Clear AOI</b>	
Import AOI	
Export AOI	
<b>Quick Navigation</b>	
<b>Address</b>	
Address	4192 General Carl W. Stiner Hwy Lafollette, TN
Show location marker	<input checked="" type="checkbox"/>
<b>View</b>	
<b>State and County</b>	
<b>Soil Survey Area</b>	
<b>Latitude and Longitude</b>	
<b>PLSS (Section, Township, Range)</b>	
<b>Bureau of Land Management</b>	
<b>Department of Defense</b>	
<b>Forest Service</b>	
<b>National Park Service</b>	
<b>Hydrologic Unit</b>	



Rice Farm Field #3: Approximate acreage available is 17.4. This field is located approximately 150 feet from the main highway. According to the soil survey website a creek borders the field but it is approximately greater than 230 feet at its closest point and greater than 400 feet at its furthest point. The applier is aware of the setbacks and will comply with the requirements.



## ATTACHMENT #2

Example of Permission for Biosolids Application form.

# *Caryville - Jacksboro Utilities Commission*

---

P. O. Box 121 — Jacksboro, Tennessee 37757

## COMMISSIONERS

ROBERT M. BURDEN, Chairman  
JAMES F. WRIGHT, Secretary  
RAY GREEN, Treasurer

## TELEPHONE

OFFICE: 562-9776  
WATER PLANT: 562-2234  
WASTEWATER PLANT: 562-9895

## Permission for Biosolids Application

I \_\_\_\_\_ do hereby give permission to Caryville-Jacksboro Utilities Commission to apply Class-B Biosolids to fields approved by Tennessee Department of Environment and Conservation. I further agree to do the actual field spreading at rates not exceeding the CJUC recommendations and to follow all site restrictions provided by CJUC contained herein below. State and Federal Regulators may have access to the site without restrictions at all times.

### Site Restrictions for Class B Biosolids

If the biosolids are Class B with respect to pathogens, the permittee shall comply with all the site restrictions listed below:

- a) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- b) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.
- c) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.
- d) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- e) Animals shall not be grazed on the land for 30 days after application of biosolids.
- f) Turf grown on land where biosolids are applied shall not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Biosolids Coordinator.



g) Public access to land with a high potential for public exposure shall be restricted for one year after application of biosolids.

h) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

### **Water-Quality Setbacks**

The land application of non-EQ biosolids shall be conducted in a manner that will not cause violation of any receiving water quality standard from discharges of surface runoff from the land application sites. Non-EQ biosolids shall not be land applied unless all of the following setbacks are met:

a) 100 feet or more from surface waters of the State of Tennessee which are positioned down gradient of the application site.

b) 33 feet or more from surface waters of the State of Tennessee which are positioned up gradient for the application site.

c) 100 feet from all wells.

d) 100 feet from all water supply reservoirs.

e) 100 feet from active sinkholes.

### **Weather-related Restrictions.**

Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk solids enters a wetland or other waters of State of Tennessee, except as provided in a permit issued pursuant to § 402 or 404 of the Clean Water Act.

### **Soil Restrictive Site Conditions**

Biosolids shall not be applied to any site area with standing surface water or if the annual high groundwater level is known or suspected to reach the surface of the land application site.

Where biosolids will be land applied on land subject to temporary flooding, the soils in these landscape positions, at a minimum, must be well drained, must be undisturbed (natural), must not be a wetland, and must not contain any drains or artificially constructed conduits to Waters of the State of Tennessee.

Liquid biosolids shall not be applied to slopes exceeding 8%, except where they will be injected or incorporated into the soil, and then slopes up to 15% are acceptable. Biosolids with a percent solids of 17% or greater can be applied on slopes up to 15%.

### **Threatened and Endangered Species**

The biosolids or the application of the biosolids shall not cause or contribute to the harm of a threatened or endangered species listed under section 4 of the Endangered Species Act or result in the destruction or adverse modification of critical habitat of a threatened or endangered species after application.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_